

Title (en)
BLANK, THREE-DIMENSIONAL STRUCTURE PRODUCED THEREFROM, AND FOLDING BOX

Title (de)
ZUSCHNITT, DARAUS HERGESTELLTE DREIDIMENSIONALE STRUKTUR UND FALTSCHACHTEL

Title (fr)
DÉCOUPE, STRUCTURE TRIDIMENSIONNELLE OBTENUE À PARTIR DE CELLE-CI ET BOÎTE PLIANTE

Publication
EP 3668803 A1 20200624 (DE)

Application
EP 18750163 A 20180802

Priority
• DE 202017104977 U 20170818
• EP 2018070981 W 20180802

Abstract (en)
[origin: WO2019034438A1] The invention relates to a blank (10) for producing a three-dimensional structure from paper, cardboard, or plastic, in particular a package or the like, comprising at least three lateral surfaces (12, 14, 16, 18) and at least one bottom and/or top tab (20, 24) for forming the three-dimensional structure in a folded state of the blank (10), at least two of the lateral surfaces (12, 14, 16, 18) and/or at least one of the lateral surfaces (12, 16) having the bottom and/or cover tab (20, 24) being connected to one another by means of at least one mechanically produced groove line (36, 38, 40, 56, 58). The mechanically produced groove line (36, 38, 40, 56, 58) is produced without ablation or other removal of material from the blank (10), at least one groove (62, 64, 66, 68, 70) being produced by means of a laser within at least one of the lateral surfaces (14, 16, 18) connected by means of the groove line (36, 38, 40, 56), and the groove (62, 64, 66, 68, 70) being configured to run at an angle to the groove line (36, 38, 40, 56) and impinging on or intersecting the groove line. The invention further relates to a three-dimensional structure made of paper, cardboard or plastic and to a folding box.

IPC 8 full level
B65D 85/10 (2006.01)

CPC (source: EP KR RU US)
B31B 50/742 (2017.07 - US); **B31D 5/00** (2013.01 - KR); **B65D 5/02** (2013.01 - RU); **B65D 5/0254** (2013.01 - EP KR); **B65D 5/20** (2013.01 - KR US); **B65D 5/425** (2013.01 - EP KR US); **B65D 5/4266** (2013.01 - EP KR US); **B65D 85/10** (2013.01 - KR RU US); **B31B 50/26** (2017.07 - US); **B31B 50/624** (2017.07 - US); **B31B 2110/35** (2017.07 - US); **B31B 2120/102** (2017.07 - US); **B31B 2241/003** (2013.01 - US); **B65D 85/10** (2013.01 - EP)

Citation (search report)
See references of WO 2019034438A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 202017104977 U1 20180821; EP 3668803 A1 20200624; EP 3668803 B1 20240124; ES 2974696 T3 20240701; JP 2020531369 A 20201105; JP 7128883 B2 20220831; KR 102642794 B1 20240304; KR 20200043389 A 20200427; PL 3668803 T3 20240624; PT 3668803 T 20240318; RU 2020111017 A 20210920; RU 2020111017 A3 20211020; RU 2760053 C2 20211122; US 11866235 B2 20240109; US 2020247576 A1 20200806; WO 2019034438 A1 20190221

DOCDB simple family (application)
DE 202017104977 U 20170818; EP 18750163 A 20180802; EP 2018070981 W 20180802; ES 18750163 T 20180802; JP 2020506340 A 20180802; KR 20207004897 A 20180802; PL 18750163 T 20180802; PT 18750163 T 20180802; RU 2020111017 A 20180802; US 201816639359 A 20180802